<u>Claims</u>

What is claimed is:

1. A method of grouping storage media, said method comprising:

obtaining parameter information for one or more parameters associated with a plurality of storage media; and

grouping at least a portion of storage media of the plurality of storage media into one or more groups of storage media based on at least one parameter of the one or more parameters.

- 2. The method of claim 1, wherein the one or more groups comprise one or more arrays to be used in creating at least one logical array of media.
- 3. The method of claim 1, wherein the one or more parameters comprise at least one parameter associated with residence time of a storage medium head as a function of storage medium cylinder.
- 4. The method of claim 1, wherein the one or more parameters comprise at least one parameter associated with one or more servo errors of a storage medium.
- 5. The method of claim 1, wherein the one or more parameters comprise at least one parameter associated with one or more functions of a storage medium.
- 6. The method of claim 1, wherein the one or more parameters comprise at least one parameter associated with one or more environmental conditions of a storage medium.
- 7. The method of claim 1, wherein the one or more parameters comprise at least one parameter associated with a state of one or more internal components of a storage medium.

- 8. The method of claim 1, wherein the grouping comprises using the at least one parameter to define a group that satisfies at least one selected criterion.
- 9. The method of claim 1, further comprising reconfiguring at least one group of storage media of the one or more groups of storage media.
- 10. The method of claim 9, further comprising periodically obtaining parameter information for one or more parameters associated with the at least one group to be reconfigured, and wherein the reconfiguring is based on the periodically obtained parameter information.
- 11. The method of claim 1, wherein the plurality of storage media comprise a plurality of storage devices.
- 12. The method of claim 1, wherein the plurality of storage media comprise a plurality of surfaces of a plurality of storage devices.
 - 13. The method of claim 12, further comprising:

determining that at least one parameter of the one or more parameters is within a specified range; and

eliminating use of a surface of the plurality of surfaces, in response to the determining.

14. The method of claim 1, further comprising:

selecting a group of storage media of the one or more groups that satisfies a chosen criterion; and

writing data having a selected attribute to the storage media of the selected group.

15. The method of claim 14, wherein the chosen criteria is performance and
the selected attribute is access frequency of a certain value.

16. A system of grouping storage media, said system comprising:

means for obtaining parameter information for one or more parameters associated with a plurality of storage media; and

means for grouping at least a portion of storage media of the plurality of storage media into one or more groups of storage media based on at least one parameter of the one or more parameters.

- 17. The system of claim 16, wherein the one or more groups comprise one or more arrays to be used in creating at least one logical array of media.
- 18. The system of claim 16, wherein the one or more parameters comprise at least one parameter associated with one or more of the following:

residence time of a storage medium head as a function of storage medium cylinder;

one or more servo errors of a storage medium;

one or more functions of a storage medium;

one or more environmental conditions of a storage medium; and a state of one or more internal components of a storage medium.

- 19. The system of claim 16, wherein the means for grouping comprises means for using the at least one parameter to define a group that satisfies at least one selected criterion.
- 20. The system of claim 16, further comprising means for reconfiguring at least one group of storage media of the one or more groups of storage media.

21. The system of claim 16, wherein the plurality of storage media comprise a plurality of surfaces of a plurality of storage devices, and wherein the system further comprises:

means for determining that at least one parameter of the one or more parameters is within a specified range; and

means for eliminating use of a surface of the plurality of surfaces, in response to the determining.

22. The system of claim 16, further comprising:

means for selecting a group of storage media of the one or more groups that satisfies a chosen criterion; and

means for writing data having a selected attribute to the storage media of the selected group.

23. A system of grouping storage media, said system comprising:

parameter information for one or more parameters associated with a plurality of storage media; and

a component to group at least a portion of storage media of the plurality of storage media into one or more groups of storage media based on at least one parameter of the one or more parameters.

24. An article of manufacture comprising:

at least one computer usable medium having computer readable program code logic to manage grouping of storage media, the computer readable program code logic comprising:

obtain logic to obtain parameter information for one or more parameters associated with a plurality of storage media; and

group logic to group at least a portion of storage media of the plurality of storage media into one or more groups of storage media based on at least one parameter of the one or more parameters.

- 25. The article of manufacture of claim 24, wherein the one or more groups comprise one or more arrays to be used in creating at least one logical array of media.
- 26. The article of manufacture of claim 24, wherein the one or more parameters comprise at least one parameter associated with one or more of the following:

residence time of a storage medium head as a function of storage medium cylinder;

one or more servo errors of a storage medium;

one or more functions of a storage medium;

one or more environmental conditions of a storage medium; and a state of one or more internal components of a storage medium.

27. The article of manufacture of claim 24, wherein the group logic comprises use logic to use the at least one parameter to define a group that satisfies at least one selected criterion.

- 28. The article of manufacture of claim 24, further comprising reconfigure logic to reconfigure at least one group of storage media of the one or more groups of storage media.
- 29. The article of manufacture of claim 24, wherein the plurality of storage media comprise a plurality of surfaces of a plurality of storage devices, and further comprising:

determine logic to determine that at least one parameter of the one or more parameters is within a specified range; and

eliminate logic to eliminate use of a surface of the plurality of surfaces, in response to the determining.

30. The article of manufacture of claim 24, further comprising:

select logic to select a group of storage media of the one or more groups that satisfies a chosen criterion; and

write logic to write data having a selected attribute to the storage media of the selected group.
